

Periscope.

CLINICAL NEUROLOGY.

FORMES CLINIQUES DES PARALYSIES DU PLEXUS BRACHIAL. (Clinical Forms of Paralysis of the Brachial Plexus.) HENRI GRENET (Archives Générales de Médecine. Vol. IV, October, 1900).

From an exhaustive and interesting study on this subject a number of important conclusions may be derived. (1) MIXED FORMS OF PARALYSES: (a) One can describe as many forms of the paralysis as there are segments in the plexus. There exist root paralyses, both intra and extra spinal; paralyses of the first, second and third segments of the plexus, and paralysis of the terminal branches. (b) An examination of the collateral nerves of the plexus determines the form of the paralysis. (c) It is possible to recognize the root origin of a superior paralysis by the involvement of the supra and infra spinous muscles innervated by the supra scapular nerve. One recognizes the intra-spinal origin of a superior paralysis by the involvement of the serratus magnus. (d) Inferior root paralysis of the first portion of the intra-spinal segment is recognized by the oculo-pupillary phenomena. But an inferior root paralysis is not accompanied by these if the seat of the lesion is beyond the sympathetic anastomosis. (e) There does not seem to exist any apparent and important clinical difference between an inferior extra-spinal root paralysis and an involvement of the first segment of the plexus. (f) All of these forms are secondary. Only two great clinical types exist: The root paralyses and the terminal paralyses. (g) The paralyses described under the name of paralyses of the plexus, properly so-called, assume sometimes the root type (first segment), at other times the terminal type (third segment). These do not constitute a special clinical form, but accessory types dependent on the one or the other of these two great divisions.

(2) MOTOR PARALYSES. (a) The pure motor paralyses ordinarily result from isolated lesions of the anterior roots. Sometimes the lesion may extend beyond the union of the anterior and the posterior roots without any resultant sensory symptoms. (c) Lesion of the two roots, at least, is ordinarily necessary to determine a motor paralysis. In some cases lesion of a single root is sufficient to produce a paralysis. The motor root distribution seems then subject to some individual variations.

(3) SENSORY PARALYSES. (a) The sensory paralyses seem to result in all cases from intra-spinal lesions (before the blending of the two roots) of the spinal roots. (b) Lesion of the three roots *may* not suffice. Lesion of one root may be sufficient to produce sensory symptoms. The individual variations appear greater in the sensory root distribution than in the motor distribution. (c) The restitution of diseased roots by healthy ones is not always complete. Very limited zones of anesthesia may appear after lesions of a single root, despite the integrity of other roots distributing fibers to the same territory.

(4) DIAGNOSIS. (a) The paralyses of the root type are characterized by the localization of the symptoms to a particular muscular group and by the band-like disposition of the anesthesia. The paral-

yses of the terminal type are distinguished by the limitation of the symptoms to the exact area of distribution of one or several peripheral nerves. (b) Hysteria is recognized especially by the distribution of the sensory symptoms. (c) Paralyzes of the peripheral nerves may simulate those of the root type when several nerves are simultaneously involved or when the symptoms extend to the territory of neighboring nerves.

JELLIFFE.

DE L'HEMIPLEGIE TRAUMATIQUE (Traumatic Hemiplegia). RENÉ MARTIAL (Nouvelle Iconographie de la Salpêtrière, 13th Year, Nos. 3, 4 and 5. 1900).

This is a very careful study of hemiplegia following head injuries. The following abstract aims only to mention some of the general facts deduced from this study. The paper presents a careful analysis of forty-seven cases of traumatic hemiplegia, including in this number some personal observation of the author. The following is the general scheme of the paper: A study of cases of traumatic hemiplegia in all ages, except the first years of life, from the point of view of etiology, pathology, clinical symptoms, and of subsequent effects of such injuries, which have to do principally with the psychical state, thus medicolegally of interest. The first observations of traumatic hemiplegia found in literature is by a Lyons physician, Fouhoux, in 1844. The etiologic factors are varied in this present series of 47 cases; 21 are due to blows on the head, 11 to pistol shots, 10 to falls on the ground, 4 to penetrating instruments, and 1 from a burn in the region of the temporal lobe in a child. The left parietal region, the right temporal, orbital, malar and the occipital are the regions of the head in their order of frequency with respect to the location of the injury followed by hemiplegia. As a predisposing cause alcohol occupies the first place. In the 47 cases, 17 were alcoholic; especially is this so in the central hemiplegias. There are two main forms of this condition, traumatic simple or immediate hemiplegia and late traumatic hemiplegia. In the first are included those where the hemiplegia follows immediately on the trauma. In the second are included those in which the hemiplegia occurs after the lapse of a certain time. In the series of cases studied under the first division, some of the facts noted are these: Hemianopsia is frequent. Dilatation of the pupil was found seven times. Strabismus present in a few instances. Aphasia observed ten times. Elevations of temperatures observed in acute form; the pulse rate is increased up to 150 or 160. Both these latter symptoms are only temporary. Under the second group are described cases which, in general, follow this description: After some head injury, as a rule without any external evidence of trauma, the patient seemingly recovers, with the exception of a feeling of fatigue or dizziness. Soon afterwards the hemiplegia develops with aphasia, etc. These cases are not traumatic hysteria, for post-mortem examination shows often very definite lesions in the interior of the brain, the cortex being uninjured. The time elapsing between the injury and the development of the symptoms is variable, from 36 hours to 2 or 5 months or more. As the result of experiments with blows and projectiles on animals, the fact is noted that traumatism can produce hemiplegia by a direct or by an indirect action on the brain, by causing a hemorrhage or an encephalitis. In the latter case, preëxisting affections must be considered. The diagnosis of the seat of the lesion is generally easy. In point of prognosis the author is of the opinion that traumatic hemiplegia is an affection which has a well marked tendency to recovery. In this regard it is